

	TNVs	$\underline{ATGGGGTTTGGGCTGAGCTG} GGTTTTCCTCGTTGCTCTTTTAAGA$
5		
10	germline TNVs TNV148(B)	Q V Q L V E S G G V CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTGTCCAGTGT
15	germline TNVs	V Q P G R S L R L S C A A S G GTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGA
20	germline TNV14,15 TNV148(B) TNV196	F T F S S Y A M H W V R Q A P TTCACCTTCAGTAGCTATGCTATGCACTGGGTCCGCCAGGCTCCA . T
	germline TNV14 TNV15 TNV148(B) TNV196	G K G L E W V A <u>V I S Y D G S</u> GGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGAAGC
	germline TNV14 TNV15 TNV148(B) TNV196	N K Y A D S V K G R F T I S AATAAATACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCC .GC .A.G. .A

FIGURE 2A

5	germline AGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTG TNV14 TNV15
10	R A E D T A V Y Y C A R germline AGAGCTGAGGACACGGCTGTGTATTACTGTGCGAGA TNV14,15
15	
20 1935 25	germline TACTACTACTACTACGGTATGGACGTCTGG TNV14 ATATCAGCAGGTGGAA TNV15 G.C A.T. T TNV148(B) . G A TNV196 . TGG
35	G Q G T T V T V S S germline GGGCAAGGGACCACGGTCACCGTCTCCTCAG TNV14 .C

FIGURE 2B

	TNVs	<u>ATGGAAGCCCCAGCTC</u> AGCTTCTCTTCCTCCTGCTACTCTGGCTC
5	germline TNVs	E I V L T Q S P A T GAAATTGTGTTGACACAGTCTCCAGCCACC CCAGATACCACCGGA
10	germline TNVs	L S L S P G E R A T L S C R A CTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCC
15	germline TNV14,15 TNV148,196	SOSVSSYLAWYQQKP AGTCAGAGTGTTAGCAGCTACTTAGCCTGGTACCAACAGAAACCT
20	germline TNVs	G Q A P R L L I Y <u>D A S N R A</u> GGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAACAGGGCC
	germline TNVs	T G I P A R F S G S G S G T D ACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAC
	germline TNVs	F T L T I S S L E P E D F A V TTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTT
3 5	Germline TNVs	Y Y C Q Q R S N W P P F T F G TATTACTGTCAGCAGCGTAGCAACTGGCCTCCATTCACTTTCGGC
40	germline TNVs	P G T K V D I K R CCTGGGACCAAAGTGGATATCAAACGT

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	CTITA TO .		
	ger TNVs	mline <u>MGFGLSW</u> VFLVALLRGVQC	signal
5	germline TNVs TNV148(B)	QVQLVESGGGVVQPGRSLRLSCAASGFTFSI	FR1
10	germline TNVs	SYAMH 	CDR1
15	germline TNVs TNV148(B)	WVRQAPGKGLEWVA FR:	2
20	germline TNV14 TNV15 TNV148(B) TNV196	VISYDGSNKYYADSVKG I.LS.KD F.LK FMKS	CDR2
	germline TNV14 TNV15 TNV148 TNV148B TNV196	RFTISRDNSKNTLYLQMNSLRAEDTAVYYCARA	
	germline TNV14 TNV15 TNV148(B) TNV196		CDR3

FIGURE 4

germline WGQGTTVTVSS TNVs

J6

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	TNVs	MEAPAQLLFLLLWLPDTTG	signal
5	germline TNVs	EIVLTQSPATLSLSPGERATLSC	FR1
10	germline TNV14 TNV15 TNV148(B) TNV196	RASQSVSSYLAY	CDR1
15	germline TNVs	WYQQKPGQAPRLLIY	FR2
20	germline TNVs	DASNRAT	DR2
	germline TNVs	GIPARFSGSGSGTDFTLTISSLEPEDFAVYY	
Agenta and	germline TNVs	QQRSNWPPFT	CDR3
3 5 3 5	germline TNVs	FGPGTKVDIK 	J3

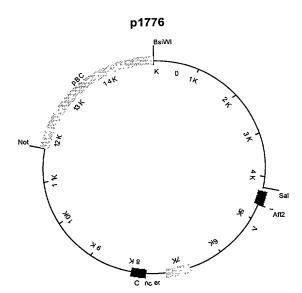
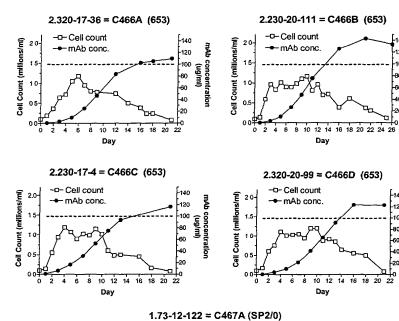


FIGURE 6



-120 -100

80 60 40

mAb concentration (ug/ml)

--- Cell count Cell Count (millions/ml) mAb concentration (ug/ml) -mAb conc. -100 15-1 0-

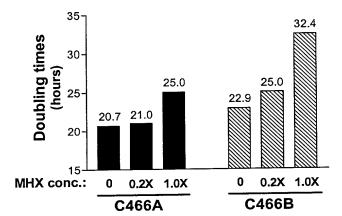
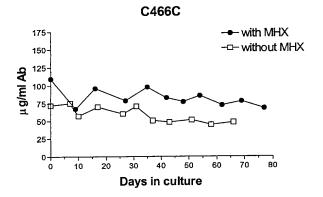


FIGURE 8



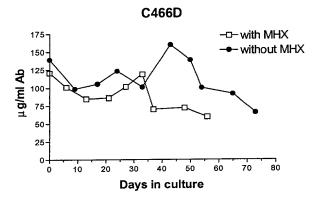


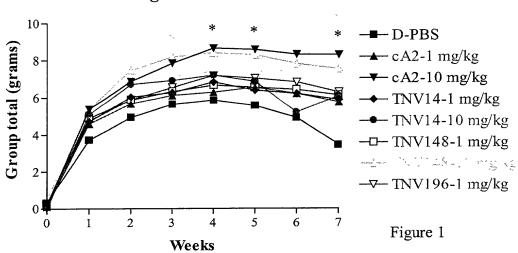
FIGURE 9



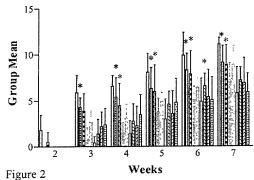
15

20

Body Weights Change from baseline



Arthritic Index



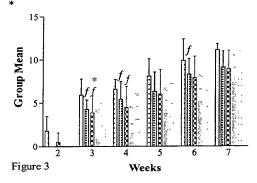
EIIIII cA2-1 mg/kg (gr. #2) 5555 TNV14-1 mg/kg (gr #4) **開稿 [NV] 48-1 mg kg (gr.46)** III 1887-005 1 mg 35/187-87 CA2-10 mg/kg (gr.#3) TNV14-10 mg/kg (gr.# 5) ZZZZ TNV148-10 mg/kg (gr.#7) TNV 196-10 mg/kg (gr. #9)

D-PBS (gr.#1)

Groups NOT denotes significantly reduced when compared to the D-PBS Group. All Groups not marked are significant (p<0.050).

FIGURE 11A

Arthritic Index

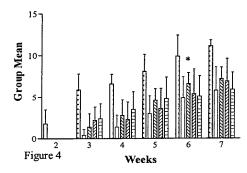


D-PBS (gr.#1) **LIIIIII** cA2-1 mg/kg (gr. #2) **53335** TNV14-1 mg/kg (gr. #4) 実験 [NV45- my ke ger-6]

* significant (p<0.05) when compared to saline. f Significantly INCREASED when compared to TNV148

FIGURE 11B

Arthritic Index



D-PBS (gr.#1) □□□ cA2-10 mg/kg (gr.#3) XXXX TNV14-10 mg/kg (gr.# 5) ZZZZ TNV148-10 mg/kg (gr.#7) TNV 196-10 mg/kg (gr. #9)

denotes Groups significantly reduced when compared to the D-PBS All Groups not marked are significant (p<0.050).

FIGURE 11C

15

5

10

25

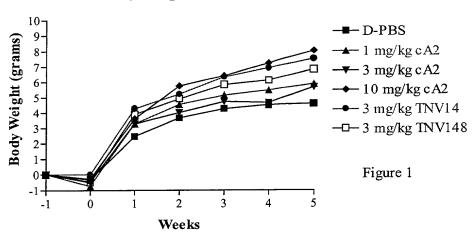
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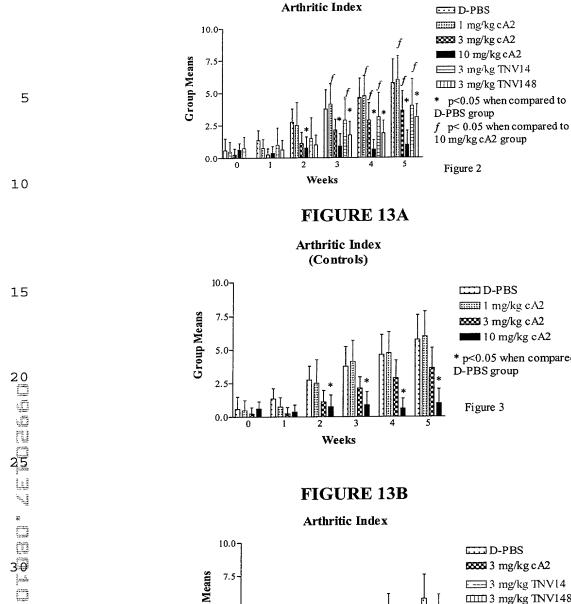
10

15

20

Change in Body Weight (Group means)





40

45

FIGURE 13B

Arthritic Index 10.0-D-PBS 3 mg/kg cA2 Group Means 7.5 ≡ 3 mg/kg TNV14 IIIII 3 mg/kg TNV148 5.0 * p<0.05 when compared to D-PBS group 2.5 Figure 4 Weeks

p<0.05 when compared to

Figure 2

D-PBS

D-PBS group

Figure 3

1 mg/kg cA2

155555 3 mg/kg cA2 ■ 10 mg/kg cA2

* p<0.05 when compared to

FIGURE 13C

Change in Body Weight

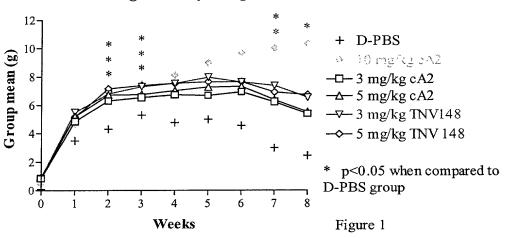
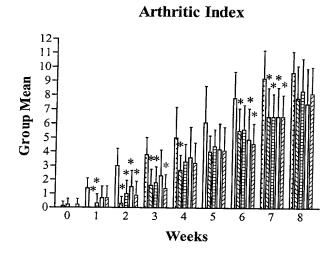


FIGURE 14

10

15



D-PBS

5 mg/kg cA2

5 mg/kg TNV 148 mg/kg TNV 148

IIII 3 mg/kg cA2

2222 3 mg/kg TNV148

 $^{*}\,$ p<0.05 when compared to D-PBS group

Figure 2

FIGURE 15

35

Group Mean (grams) *

5.0-

2.5

0.0

-2.5

-5.0|

Change in Body Weight

Weeks

6

--- D-PBS

← cA2-10mg/kg

- rTNV148B-1mg/kg

*denotes a p value of <0.05 when compared to D-PBS

---- cA2-1mg/kg —**▼**— TNV148-1mg/kg

Figure 1

5

10

15

200 25 30

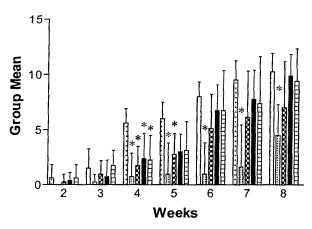
FIGURE 16

35

10

15

Arthritic Index



D-PBS

CA2-10mg/kg

EXXXX cA2-1mg/kg

TNV148-1 mg/kg

☐ rTNV148B-1mg/kg

*denotes a p value of <0.05 when compared to D-PBS

Figure 2